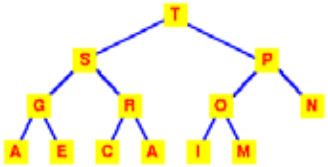
Clatsop Community College

CS 135H: Advanced Web Site Design and Development

Winter 2009

3 Credit Hours
Instructor: Lucien Swerdloff
Location: IMTC Computer Lab
Time: TT 1:00-2:50



Course Description
This is the second course in Web design and development. Students create interactive World Wide Web sites using scripting and Dynamic XHTML. Students examine the principles and elements of effective web design.

Course Learning Outcomes
After completing this course, students will be able to:
•Identify and demonstrate the use of interactive web page design principles to create web pages with a high degree of usability and security.
•Identify client-side and server-side issues in web site design.
•Demonstrate the use of forms and their associated events.
•Demonstrate the use of scripts to program client-side activities.
•Demonstrate the use of Dynamic XHTML and the Document Object model (DOM) to create dynamic web page content.
•Identify and describe the use of the Extensible Markup Language (XML) for document processing.
•Identify and describe the issues involving security for server side applications.
•Design, develop, test and publish an interactive web site.

Methodology
Class will meet twice a week for two hours each. The first meeting will generally be lecture and the second meeting will generally be lab. Lecture hours will consist of presentations, discussions, demonstrations and tutorials. Lab hours will typically be used for review and work time, providing extensive hands-on experience. Students will be required to do a number of exercises throughout the term and a project. Presentations and demonstrations given during class will provide a basis for the exercises. Students should expect to spend at least four hours per week outside of class time to work on exercises and project.

Prerequisite
CS 125H Beginning Web Site Design and Development or instructor approval.

Required Text
Web Design in a Nutshell, 3rd ed., Jennifer Niederst Robbins, O'Reilly, 2006, 0-596-00987-9.

Recommended Text
The Web Wizard's Guide to DHTML and CSS, Steven Estrella, Addison Wesley, 2003.

Required Materials
USB Flash Drive. Sketch pad and colored pencils.

Attendance and Participation
Attendance and participation in all classes is strongly recommended and necessary for successful completion of the course and learning of material. The learning of web design principals and tools requires time, practice and patience. The course will introduce many topics. It will be necessary to spend a considerable amount of time working and interacting with other students in order to grasp the tools and concepts covered.

Grading
Exercises will be graded for creativity, content, completeness and presentation that demonstrate an understanding of the issues covered and your concept and development. All exercises will be due at the beginning of class on the specified due date. Students will be organized into groups to complete and present several group components of exercises. Class participation, attendance and initiative will be considered in the evaluation process.

Grading will be determined as follows:

Exercises	30%
Group Reviews	15%
Project	55%

Online
Class Web Site: http://www.clatsopdesign.com
Blackboard: http://bb1.clatsopcc.edu
Email/SkyDrive: http://home.live.com/

Login information:
User Name: first initial, last name, last three digits of student ID
Password: birthday in format YYYYMMDD

Instructor Information
Office Hours: MW 1:00-2:00 – IMTC Computer Lab (MERTS Campus)
TTF 12:00-1:00 – Towler 303D (Main Campus)
Phone: 338-2301 (Towler 303D) or 338-7673 (IMTC Computer Lab)
Email: lswerdloff@clatsopcc.edu

Some Useful Web Resources
Textbook publishers: www.oreilly.com
http://wps.aw.com/aw_webwizard/
Mozilla Firefox: www.mozilla.com/firefox
Microsoft Internet Explorer: www.microsoft.com/windows/ie
DreamWeaver: www.adobe.com/products/dreamweaver/
World Wide Web Consortium: www.w3.org

SCHEDULE

1. Course Overview; Review of (X)HTML and Web Design Issues; Introduction to interactive web design concepts

Tue 6 Jan. (X)HTML review, web page design issues, Dynamic HTML (DHTML)
Reading: review ch. 1-14, 28-36
Thr 8 Jan. lab
Exercise 1: (X)HTML review

2. Web Server Issues

Tue 13 Jan. Publishing documents, server-side programming, Cookies, CGI, SSI, ASP, FTP
Thr 15 Jan. lab
Reading: ch. 4

3. HTML Forms; Project Proposal

Tue 20 Jan. HTML forms and controls
Reading: ch. 15
Thr 22 Jan. project proposal

4. Introduction to JavaScript

Tue 27 Jan. JavaScript concepts
Reading: ch. 26
Thr 29 Jan. lab
Exercise 2: Using HTML forms

5. Document Object Model; Project Review

Tue 3 Feb. Understanding and using the Document Object Model (DOM)
Reading: ch. 27
Thr 5 Feb. project review
Project: review

6. Dynamic (X)HTML: Style Sheets and JavaScript

Tue 10 Feb. Using style sheets and JavaScript to create dynamic content
Reading: ch. 16-27
Thr 12 Feb. work on project
Exercise 3: Using JavaScript in HTML documents

7. Dynamic (X)HTML: Style Sheets and JavaScript

Tue 17 Feb.Working with style sheets and JavaScript
Thr 19 Feb. lab
Reading: ch. 16-27

8. Introduction to XML; Survey of security issues in Web site design; Project Review

Tue 24 Feb. eXtensible Markup Language (XML), eXtensible Hypertext Markup Language, security issues
Reading: ch. 7,8
Thr 26 Feb. project review

9. Web site project

Tue 3 Mar. work on project
Thr 5 Mar. work on project

10. Web site project

Tue 10 Mar. work on project
Thr 12 Mar. work on project

11. Final's week: Project presentation

Tue 17 Mar. project presentation to class

Notes

Readings should be done before the week assigned. Exercises will be due at the beginning of class on the assigned due date. The above schedule is a general outline for the course; changes may be made as necessary.